SOMATIC ASPECTS OF SPORTMANSHIP SUMY UNIVERSITY ARCHERY TEAM

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Sport result depends a lot on morphologic features of the sportsman. They present one of the selective factors determining the sportsman's perspective [3].

Purpose of research is to determine body build peculiarities of the students involved in archery.

Object and methods of research. Object of the research was 28 students Sumy State University. The first group consisted of 10 students (18-23 years old) training in archery sports clubs. The second group consisted of 18 students (18-23 years old) of basic group physical culture.

For these research purposes such methods were applied - somatometric method, indices of physical development harmonicity for determination of body build peculiarities [1,4], statistic and mathematic methods[2].

Results of research and their discussion. One of the important features of the constitutional features of a person is body surface area. In the first group it was 381 ± 5,23 g \ cm, the second 375 ± 4,36 g \ cm.

As it follows from comparing 35 body build indices of university archery team and students of basic group, the sportsmen body weight is larger at 0,53% ($p < 0,05$), body length - 0,11% ($p < 0,05$), the upper segment of the body -1,84% ($p < 0,05$), middle segment of the body-0,43% ($p < 0,05$), the lower segment of the body - 0,18% ($p < 0,05$), length of the shoulder - 1,02% ($p < 0,05$), hip length - 0.65, shoulder width - 0,72% ($p < 0,05$), transverse diameter of the chest 0,64% ($p < 0,05$), antero-posterior diameter of the chest - 1,73% ($p < 0,05$), inspiratory reserve volume -0,25% ($p < 0,05$), expiratory reserve volume - 0,37% ($p < 0,05$) , circumference of the shin in the narrowest part of 1,35% ($p < 0,05$); left hand dynamometry 0,17% ($p < 0,05$) - this is probably due to the sport. While the right hand dynamometry in the first group is less than the second group by 0,42%.

35 examined somatic indices correlate[5] with the level of sportsmanship and the training experience in archery- five of them correlate with a close estimate of the rank sportsmanship subjects, eight - at average, eighteen - at low, and four - at low level. Training experience correlate with somatic parameters: with three - on average, with fifteen - at low level and fourteen - at low levels.

Conclusions. Many years of sports training in archery, as well as selection of the most talented sportsmen, have significant influence on the structure of their bodies. Sportsmen who specialize in archery are characterized by large weight-height indices: the upper, middle, lower segment of the body, shoulder length, transverse diameter of the chest, anterior - posterior diameter of the chest.

Selected indices of body build of sportsmen correlate with the level of sportsmanship and the training experience.

Literature

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